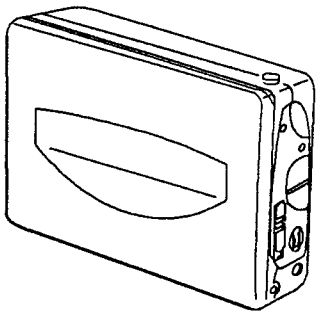
S/M Code No.0064 DATE OF ISSUE 7/1992 - T

aiwa

HS-PX410

SERVICE MANUAL



STEREO CASSETTE PLAYER

- BASIC TAPE MECHANISM : OZM – 1
- TYPE. Y, YZ, Y1, YZ1, AU

SPECIFICATIONS

Maximum output :	10mW + 10mW (EIAJ/32 Ω) 12mW + 12mW (EIAJ/16 Ω)
Power source :	DC 3V Dry cell battery : LR-03 (UM-4, AAA, R03) × 2 Rechargeable battery : PB-4 Household AC power (using an optional AC adaptor AC-207)
Weight :	Approx.198g (6.93 oz)
Dimensions :	108.6 (W) × 81.6 (H) × 26 (D) mm ($4\,^{3}/_{8} \times 3\,^{1}/_{4} \times 1\,^{1}/_{16}$ in.) incl. projecting parts and controls
Battery life :	Alkaline batteries (AAA, LR03) × 2 Approx. 8 hours (EIAJ, PB 1mV output) Manganese batteries (UM-4, AAA, R03) × 2 Approx. 4 hours (EIAJ, PB 1mV output) Rechargeable battery : PB-4 Approx. 2 hours [EIAJ, PB 1mW/10 minutes (H model is 15 minutes) recharging] Approx. 4 hours (EIAJ, PB 1mW/60 minutes recharging)

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

AIWA CO.,LTD.

Tokyo Japan

Printed in Japan

DISASSEMBLY INSTRUCTIONS

1. "Box, Battery and Cabinet, Rear" Removal

(See Figure – 1)

1) Remove the "Box, Battery" in the direction of arrow.
2) Remove 8 screws (Ⓐ× 1, Ⓑ× 3, Ⓒ× 1, Ⓓ× 1, Ⓔ× 2) and remove the "Cabinet, Rear".

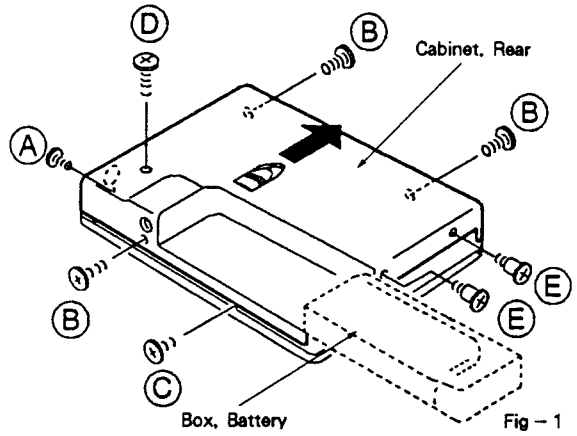


Fig – 1

1-1. "Cassette Lid ASSY" Removal (See Figure – 2)

1) Remove 5 screws (Ⓐ× 4, Ⓑ× 1) and take out the "Cassette Lid ASSY".

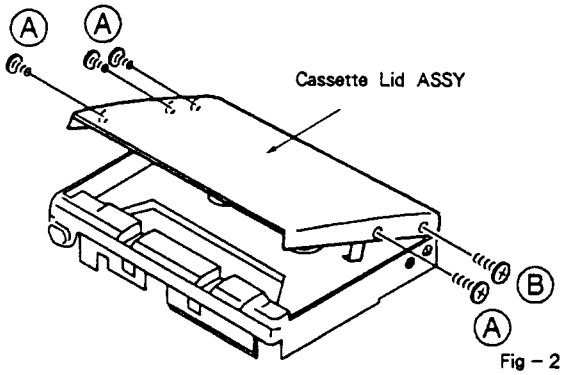


Fig – 2

2. "Frame, Control and Frame, Bottom" Removal

(See Figure – 3)

1) Remove 4 screws (Ⓐ× 2, Ⓑ× 1, Ⓒ× 1).

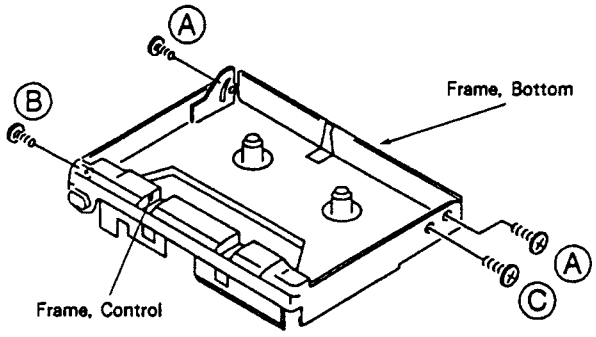


Fig – 3

2-1. "Frame, Control and Frame, Bottom" Removal

(See Figure – 4)

1) Remove the "Frame, Bottom" in the direction of the arrow ①.
2) Remove the "Frame, Control" in the direction of the arrow ②.

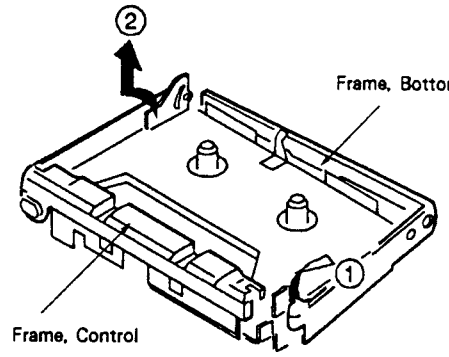


Fig – 4

3. "Main C.B" Removal (See Figure – 5)

1) Remove 4 screws (Ⓐ× 1, Ⓑ× 3) unsolder the soldered points and remove the "Main C.B"

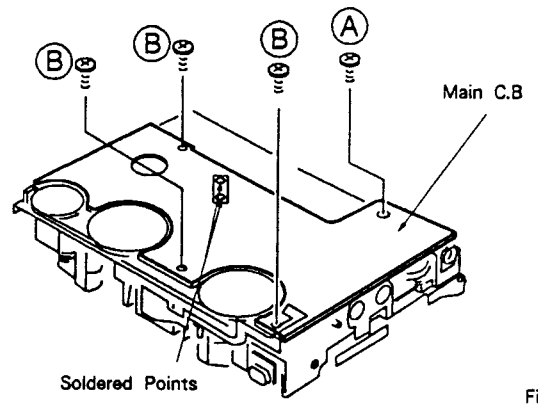


Fig – 5

4. Caution When Servicing

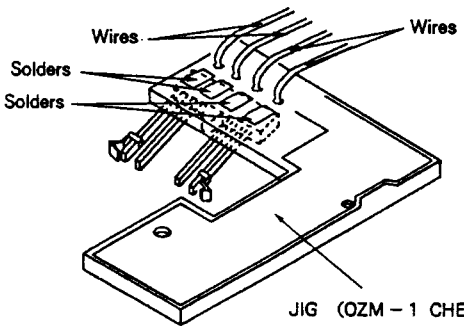
The operation check with the "Main Circuit Board" removed cannot be performed because the rotary switch of the "Gear, Cam" is separated from the mechanism. Use the following JIG (OZM－1 CHECK KIT) to perform operation check while the "Main Circuit Board".

①How to assemble the JIG (See Figure－6)

1) Assemble the JIG as shown in the figure.

OZM－1 JIG PARTS NO

PARTS NO	DISCRIPTION
09－021－052－010	OZM－1 CHECK KIT

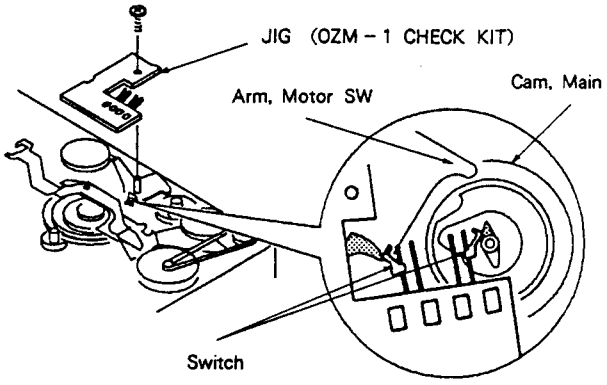


Fig－6

②How to attach the JIG (See Figure－7)

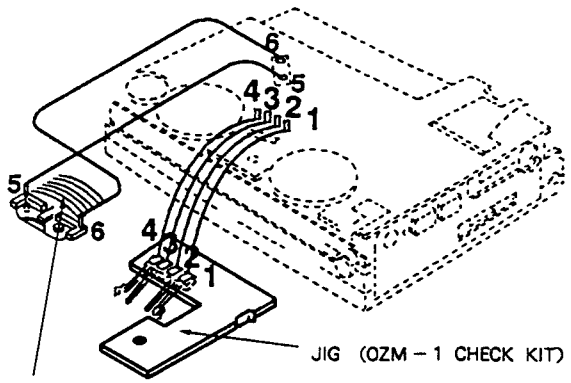
1) Tighten the JIG with screw.

Caution :Be careful that the "Cam, Main" and "Arm, Motor SW" do not ride over the switch when attaching the JIG.



Fig－7

2) Connect the "JIG and MD Plunger" to the "Main Circuit Board" using the wires as shown in the figure.(See Figure－8)



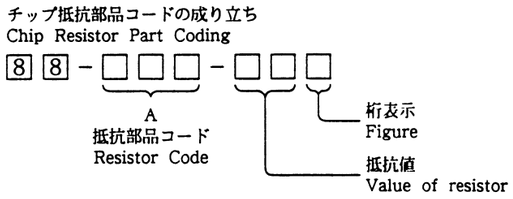
Fig－8

ELECTRICAL MAIN PARTS LIST

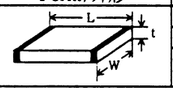
REF. NO.	PART NO.	DESCRIPTION
===IC===		
	87-001-351-089	IC, AN6612S
	87-020-955-189	IC, NJM2065AM
	87-020-670-089	IC, TA8115F
===TRANSISTOR===		
	89-112-134-089	TRANSISTOR, 2SA1213Y
	87-026-472-089	TRANSISTOR, HN1A01F(Y)
	87-026-467-089	TRANSISTOR, HN1C01F(GR)
	87-026-470-089	TRANSISTOR, HN1C03F(B)
	87-026-428-089	TRANSISTOR, RN2310
	87-026-480-089	TRANSISTOR, RN4605
	87-026-481-089	TRANSISTOR, RN4607
	87-026-482-089	TRANSISTOR, RN4610
===DIODE===		
	87-001-165-089	DIODE, CHIP 1SS300
	87-001-166-089	DIODE, CHIP 1SS301
	87-001-167-089	DIODE, CHIP 1SS302
===MAIN CIRCUIT BOARD SECTION===		
C1	★87-012-271-089	CAP, CHIP U 560P-50 B
C2	★87-012-271-089	CAP, CHIP U 560P-50 B
C3	★87-012-271-089	CAP, CHIP U 560P-50 B
C4	★87-012-271-089	CAP, CHIP U 560P-50 B
C5	★87-010-587-019	CAP, CHIP ELECT 100-2
C6	★87-010-587-019	CAP, CHIP ELECT 100-2
C7	★87-016-118-080	CAP, CHIP U 0.022-25 BJ
C8	★87-016-118-080	CAP, CHIP U 0.022-25 BJ
C9	★87-010-787-089	CAP, CHIP U 0.022-25 B
C10	★87-010-787-089	CAP, CHIP U 0.022-25 B
C11	★87-010-805-089	CAP, CHIP S 1-16F
C12	★87-010-805-089	CAP, CHIP S 1-16F
C13	★87-012-280-089	CAP, CHIP U 3300P-50 B
C14	★87-012-280-089	CAP, CHIP U 3300P-50 B
C15	★87-010-805-089	CAP, CHIP S 1-16F
C16	★87-010-805-089	CAP, CHIP S 1-16F
C17	★87-010-674-089	CAP, CHIP ELECT 220-2 MV
C18	★87-010-674-089	CAP, CHIP ELECT 220-2 MV
C20	★87-010-805-089	CAP, CHIP S 1-16F
C21	★87-010-805-089	CAP, CHIP S 1-16F
C22	★87-010-829-089	CAP, CHIP U 0.047-16F
C23	★87-010-829-089	CAP, CHIP U 0.047-16F
C24	★87-015-934-089	CAP, CHIP TANTALUM 2.2-4
C25	★87-015-934-089	CAP, CHIP TANTALUM 2.2-4
C26	★87-012-141-089	CAP, CHIP S 0.22-16 F
C27	★87-012-141-089	CAP, CHIP S 0.22-16 F
C28	★87-012-141-089	CAP, CHIP S 0.22-16 F
C29	★87-012-141-089	CAP, CHIP S 0.22-16 F
C30	★87-015-934-089	CAP, CHIP TANTALUM 2.2-4
C31	★87-015-934-089	CAP, CHIP TANTALUM 2.2-4
C32	★87-012-284-089	CAP, CHIP U 6800P-50 B
C33	★87-012-284-089	CAP, CHIP U 6800P-50 B
C34	★87-012-233-089	CAP, CHIP U 150P-50 RH
C35	★87-012-233-089	CAP, CHIP U 150P-50 RH
C36	★87-012-283-089	CAP, CHIP U 5600P-50 B
C37	★87-012-283-089	CAP, CHIP U 5600P-50 B
C38	★87-012-286-089	CAP, CHIP U 0.01-25 B
C39	★87-012-286-089	CAP, CHIP U 0.01-25 B
C40	★87-012-283-089	CAP, CHIP U 5600P-50 B
C41	★87-012-283-089	CAP, CHIP U 5600P-50 B
C42	★87-010-805-089	CAP, CHIP S 1-16F
C43	★87-010-805-089	CAP, CHIP S 1-16F
C47	★87-010-805-089	CAP, CHIP S 1-16F
C48	★87-010-805-089	CAP, CHIP S 1-16F
C49	★87-010-829-089	CAP, CHIP U 0.047-16F
C50	★87-010-829-089	CAP, CHIP U 0.047-16F
C51	★87-010-829-089	CAP, CHIP U 0.047-16F
C52	★87-010-829-089	CAP, CHIP U 0.047-16F
C53	★87-012-270-089	CAP, CHIP U 470P-50 B
C54	★87-012-270-089	CAP, CHIP U 470P-50 B
C55	★87-010-787-089	CAP, CHIP U 0.022-25 B
C56	★87-010-787-089	CAP, CHIP U 0.022-25 B
C57	★87-010-805-089	CAP, CHIP S 1-16F
C58	★87-010-805-089	CAP, CHIP S 1-16F
C100	★87-010-587-019	CAP, CHIP ELECT 100-2
C101	★87-010-805-089	CAP, CHIP S 1-16F
C102	★87-010-082-019	CAP, CHIP ELECT 220-4 5L
C103	★87-010-082-019	CAP, CHIP ELECT 220-4 5L
C104	★87-010-805-089	CAP, CHIP S 1-16F
C105	★87-010-587-019	CAP, CHIP ELECT 100-2
C106	★87-010-082-019	CAP, CHIP ELECT 220-4 5L
C107	★87-010-805-089	CAP, CHIP S 1-16F
C108	★87-010-805-089	CAP, CHIP S 1-16F
C109	★87-010-424-089	CAP, CHIP TANTALUM 4.7-4
C110	★87-012-286-089	CAP, CHIP U 0.01-25 B
C111	★87-010-746-089	CAP, CHIP TANTALUM 10-4
C112	★87-010-424-089	CAP, CHIP TANTALUM 4.7-4
C113	★87-010-196-089	CAP, CHIP S 0.1-25 F
C114	★87-010-746-089	CAP, CHIP TANTALUM 10-4
C115	★87-010-196-089	CAP, CHIP S 0.1-25 F
C116	★87-015-933-089	CAP, CHIP TANTALUM 1-10
C117	★87-015-934-089	CAP, CHIP TANTALUM 2.2-4
C118	★87-010-082-019	CAP, CHIP ELECT 220-4 5L
C119	★87-010-082-019	CAP, CHIP ELECT 220-4 5L
J2	87-049-549-019	JACK, DC(DC 2V)
L1	★81-HK1-614-080	COIL, CHIP 10 mH
L2	★81-HK1-614-080	COIL, CHIP 10 mH
LED1	87-001-573-019	LED, SLC22 VR 4F(OPE/BATT)
SOL1	87-045-310-010	SEL, MD PL
R1	87-022-436-089	RES, CHIP U 390-1/16W F
R2	87-022-436-089	RES, CHIP U 390-1/16W F
R3	87-022-431-080	RES, CHIP U 240-1/16W F
R4	87-022-431-080	RES, CHIP U 240-1/16W F
R128	87-022-042-089	RES, CHIP MF 0.51-1/8W
R129	87-022-043-089	RES, CHIP MF 8.2K-1/8W
SFR1	★87-024-076-089	SFR, CHIP 1K
SW1	87-036-123-089	SLIDE SW(TAPE)
SW2	87-036-145-089	SLIDE SW(DOLBY NR)
SW3	87-036-123-089	SLIDE SW(DSL)
SW4	87-036-201-089	SLIDE SW(FWD/REV)
SW5	87-036-199-010	LEAF SW(POWER)(LATCH)
SW7	87-036-203-089	SLIDE SW(FF/REW)
SW8	87-036-144-019	PUSH SW(PLAY)
SW9	87-036-123-089	SLIDE SW(HOLD)
SW10	87-036-073-019	TACT SW(PLAY/DIR)
SW11	87-036-073-019	TACT SW(STOP)
VR101	87-024-361-089	VR, CHIP 20K(VOLUME)
===HEAD FLEX. CIRCUIT BOARD SECTION===		
PH	87-046-381-010	HEAD ASSY(W/PCB-C)
===JACK FLEX. CIRCUIT BOARD SECTION===		
J1	87-009-218-019	JACK, 3.5 BLK(PHONES)
PCB-D	★80-HK4-604-010	FLEXIBLE CIRCUIT BOARD 4P
===MISCELLANEOUS===		
M1	87-045-309-010	MOTOR ASSY
TM1	★82-HR4-204-010	BATTERY CONTACT

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

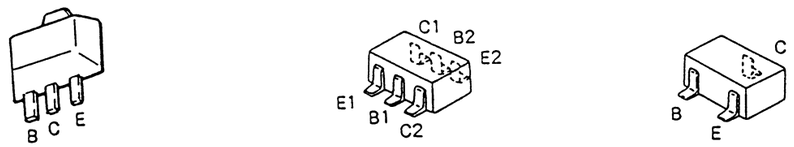
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm) Form／外形	L	W	t	Resistor Code : A 抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3126	±5%	CJ		3.2	1.6	0.5 ~0.7	128

TRANSISTOR ILLUSTRATION



2SA1213

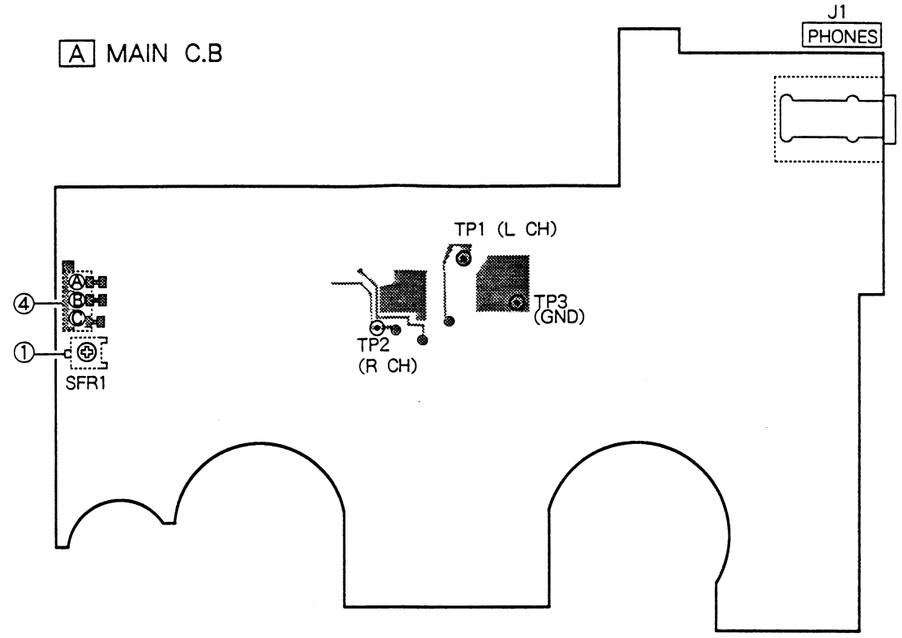
HN1A01F
HN1C01F
HN1C03FB
RN4605
RN4607
RN4610

RN2310

■ ACCESSORIES／PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★82-HKA-901-019	INSTRUCTION BOOKLET Y (Y1,YZ1,YB,YJ1,YZ)	※	1
	2	★82-HKA-902-019	INSTRUCTION BOOKLET AU (AU)	※	1
	3	★82-HKB-951-019	CARRYING CASE (YZ1,YJ1)		1
	4	★87-042-097-119	AC－207U／CA (AU)		1
	5	★87-047-116-010	PB－4 NA Y (AU)		1
	6	87-048-230-019	HP－A270 A (YB,AU)		1
	7	87-048-238-019	HP－23NA (Y1,YZ1,YJ1)		1

ADJUSTMENT



PRACTICAL SERVICE FIGURE

1. Tape Speed Adjustment
   Settings : • Test tape : TTA-100
   • Test point : PHONES JACK
   • Adjustment location : SFR1
   Method : Play back the test tape, adjust for 3000 +10Hz, −5Hz at FWD and less than 45Hz at REV.

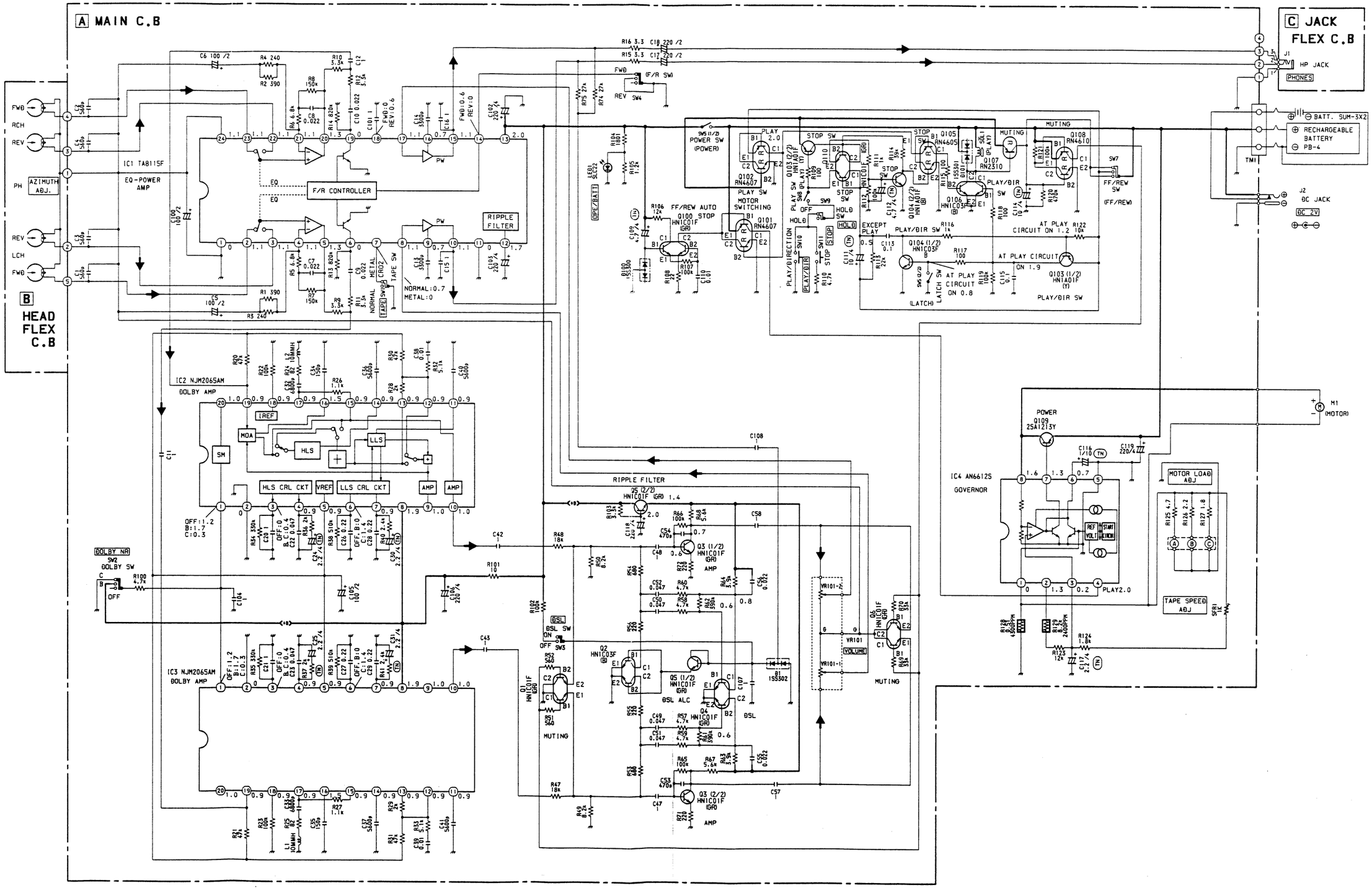
2. Dolby Level Check
   Settings : • Test tape : TTA-200
   • Test point : TP1 (L ch), TP2 (R ch), TP3 (GND)
   • DOLBY SW : OFF
   • TAPE SELECTOR : NORM
   • DIRECTION : FWD
   • VOLUME : MIN "0"
   Method : Connect at electrolytic capacitor (10 μF/16V) to measured equipment and TP1, TP2 check the voltage for 100mV + 1.5dB, − 0.5dB.

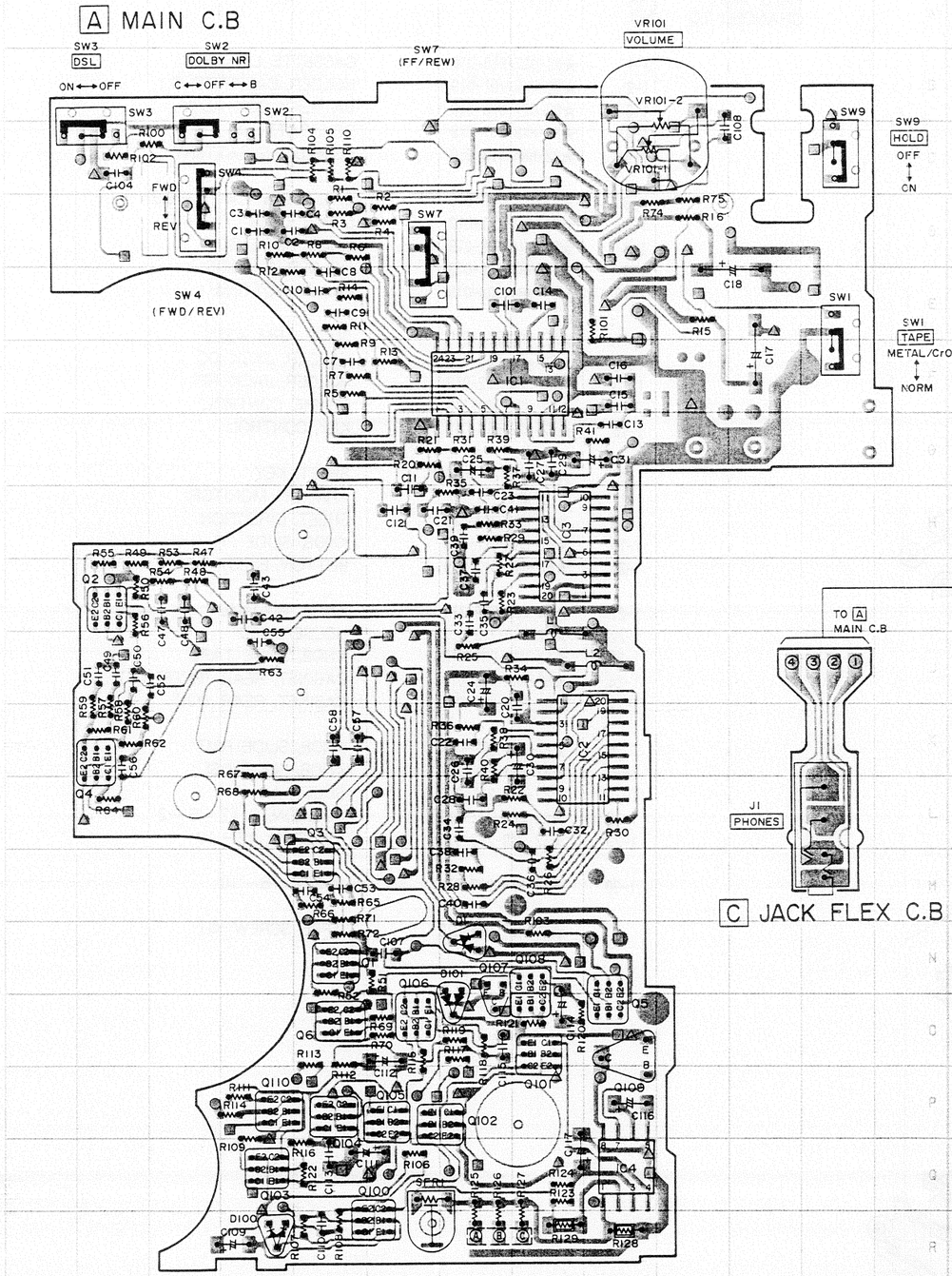
3. Azimuth Adjustment
   Settings : • Test tape : TTA-320
   • Test point : PHONES JACK
   • Adjustment location : Azimuth adjustment screw
   Method : Play the 8kHz signal of the test tape and adjust so the output is maximum and the waveforms in the Lissajours' figure are in phase.

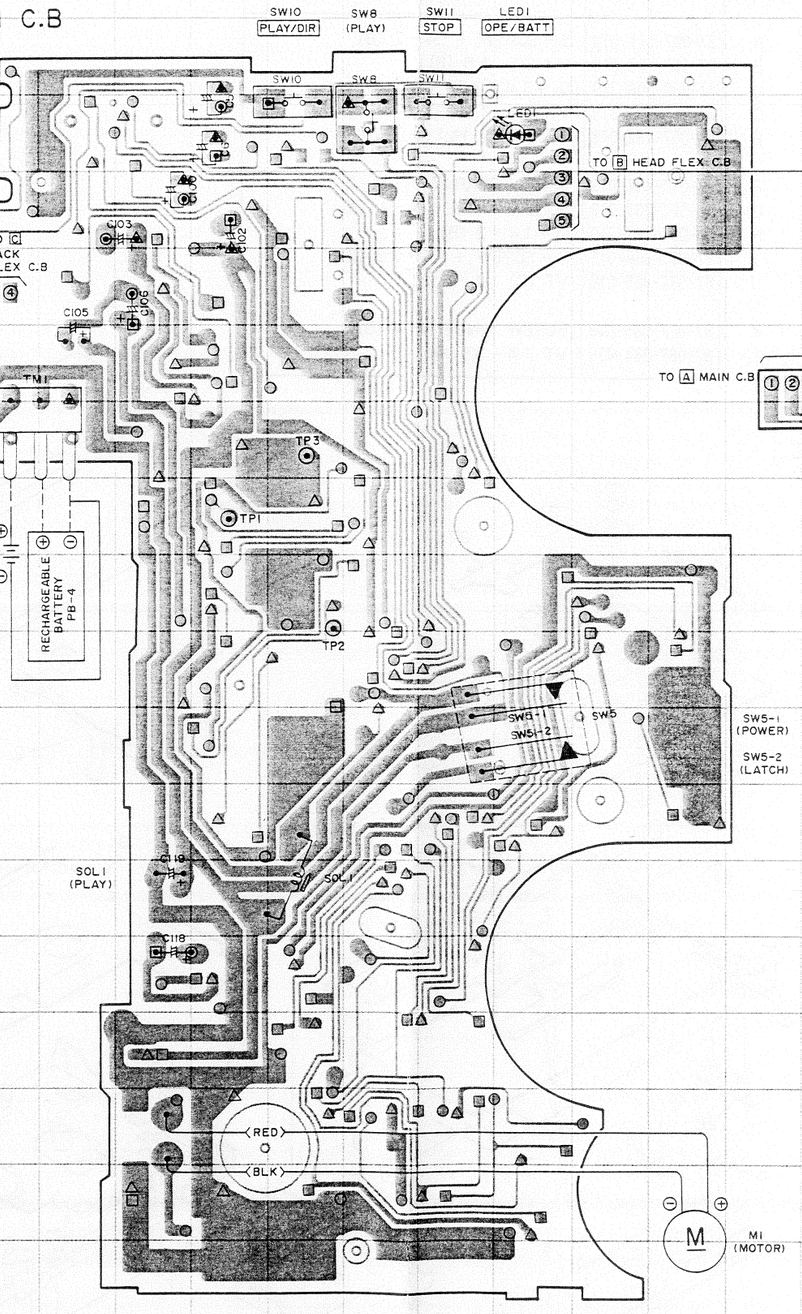
4. Motor load Adjustment
   Refer to the REF No. SI•88-037-Op of service technical information.

Tape speed :	3000 ± 60Hz
Wow & flutter :	Less than 0.45% (JIS)
Take-up torque :	20g-cm～37g-cm (FWD, REV)
F.F & Rew torque :	110 ± 40g-cm
Back tension :	3 ± 1.5g-cm (FWD, REV)
S/N ratio :	More than 45dB
Distortion :	Less than 3.0%
Noise level :	Less than 3.0mV (VOL MAX)
Frequency response :	63Hz～8kHz ± 4dB (NORMAL)

SCHEMATIC DIAGRAM

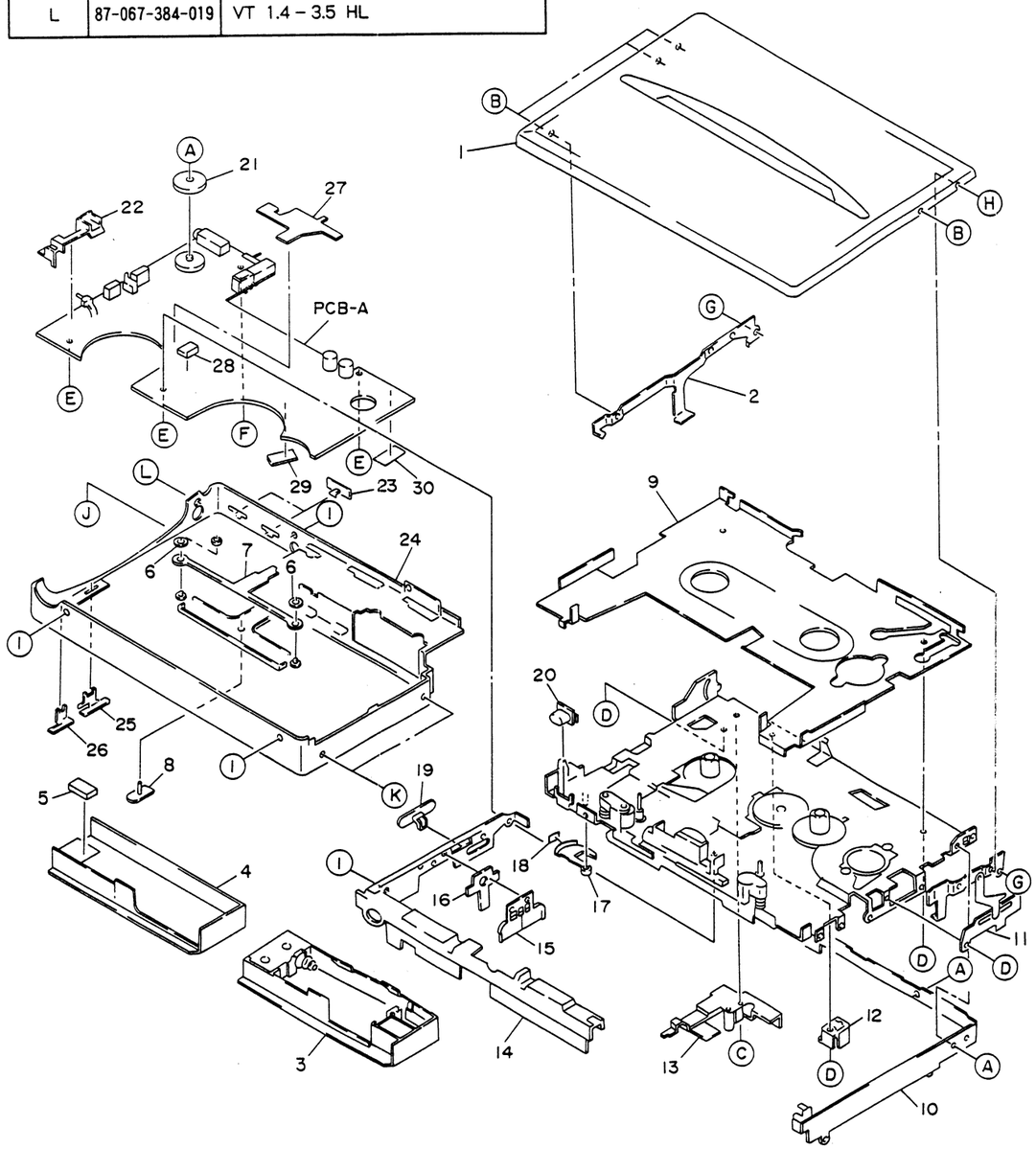



A MAIN C.B
SW3
DSL
ON ↔ OFF
SW2
DOLBY NR
C ↔ OFF ↔ B
SW7
(FF/REW)
VR101
VOLUME
SW9
HOLD
OFF
ON
SW1
TAPE
METAL/CrO2
NORM
SW4
(FWD/REV)
FWD
REV
TO A MAIN C.B
J1
PHONES
C JACK FLEX C.B


A MAIN C.B
SW10
PLAY/DIR
SW8
(PLAY)
SW11
STOP
LED1
OPE/BATT
TO C JACK FLEX C.B
TO B HEAD FLEX C.B
TO A MAIN C.B
J2 DC 2V
BATT
DC 3V
SUM-3x2
RECHARGEABLE BATTERY PB-4
TP1
TP2
TP3
SW5-1
(POWER)
SW5-2
(LATCH)
SOL1
(PLAY)
(RED)
(BLK)
M1
(MOTOR)
PH
B HEAD FLEX C.B

EXPLODED VIEW – 1

REF. NO.	PART NO.	DESCRIPTION
A	87-067-511-019	S – SCREW + 1.4 – 2 (B)
B	87-067-753-019	V + 1.4 – 1.6 (B)
C	87-232-508-319	Q + 1.4 – 3.5H (3)
D	87-261-501-319	V + 1.4 – 1.6 (B)
E	87-067-732-019	VT 1.4 – 3 HL
F	87-067-437-019	SCREW SERRAT M1.4 – 2
G	87-067-738-019	SCREW HINGE 1.4 – 1 (B)
H	87-067-593-019	Q + 1.4 – 2 (B)
I	87-067-359-019	S – SCREW + 1.4 – 2.5 (B)
J	87-067-405-019	VT (C) 1.4 – 6 HL
K	87-067-595-019	SCREW HINGE M1.4 (B)
L	87-067-384-019	VT 1.4 – 3.5 HL

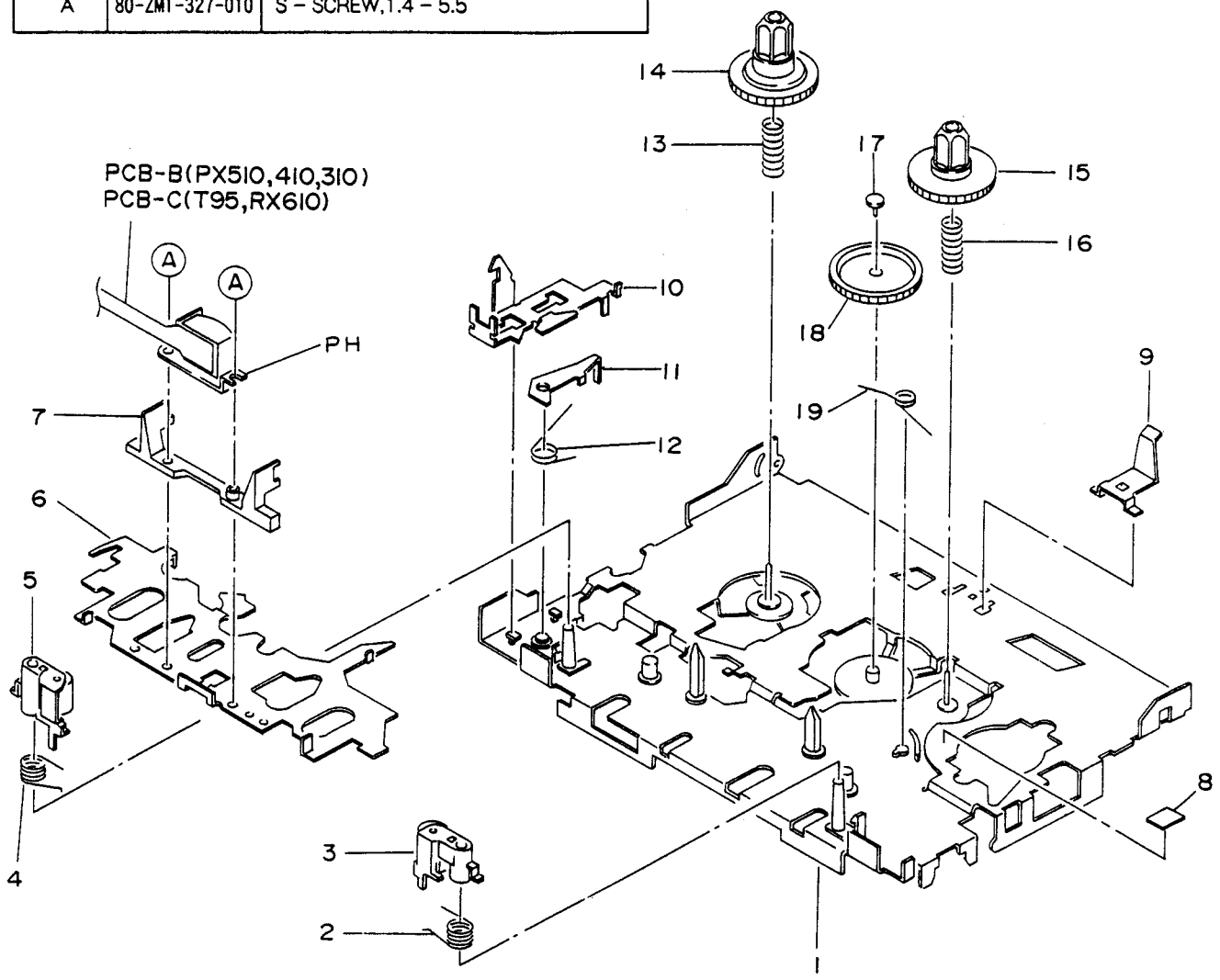


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1-1	★09-027-985-010	CASSETTE LID ASSY	※	1
	1-2	★82-HKB-201-019	HOLDER, CASSETTE R		1
	1-3	★09-027-979-010	BATTERY BOX ASSY	※	1
	1-4	★82-HKB-007-019	BOX, BATTERY		1
	1-5	★82-HR4-218-019	CUSHION, S BATTERY		1
	1-6	★82-HR4-215-019	SHEET, DIA 2.4 – 6 – 0.3		2
	1-7	★82-HR4-211-019	LEVER, LOCK		1
	1-8	★82-HR4-018-019	KNOB, SLIDE BOX		1
	1-9	★82-HR4-209-019	HOLDER, CHASSIS		1
	1-10	★82-HR4-004-019	FRAME BOTTOM		1
	1-11	★82-HKB-204-010	SLIDE ARM ASSY		1
	1-12	★82-HR4-203-019	HOLDER, JACK DC		1
	1-13	★82-HR4-202-019	HOLDER, JACK HP		1
	1-14	★82-HR4-003-119	FRAME, CONTROL		1
	1-15	★82-HR4-010-019	KEY, CONTROL		1
	1-16	★82-HR4-214-019	SHEET, KEY		1
	1-17	★80-HK4-213-110	ARM, DR MONITOR		1
	1-18	★80-HK4-234-019	SHEET, DIRECTION		1
	1-19	★82-HR4-011-019	KNOB, SLIDE FR		1
	1-20	★82-HR4-012-019	BUTTON, EJECT		1
	1-21	★84-438-009-210	KNOB, VOLUME		1
	1-22	★82-HR4-210-010	HOLDER, LED		1
	1-23	★82-HR4-007-019	KNOB, SLIDE TAPE		2
	1-24	★82-HKA-002-019	CABINET, REAR (EXCEPT YJ1)	※	1
	1-24	★82-HKA-003-019	CABINET, REAR (YJ1)	※	1
	1-25	★82-HR4-009-019	KNOB, SLIDE RMT		1
	1-26	★82-HR4-008-019	KNOB, SLIDE DSL		1
	1-27	★82-HR4-216-019	SHEET, AF		1
	1-28	★82-HR4-222-019	CUSHION, S 12 – 5 – 2		1
	1-29	★82-HK9-213-019	HIMERON, 15 – 10		1
	1-30	★82-HR4-217-019	SHEET, 15 – 10		1
		★09-027-975-010	APPE SCREW KIT	※	1

EXPLODED VIEW – 2

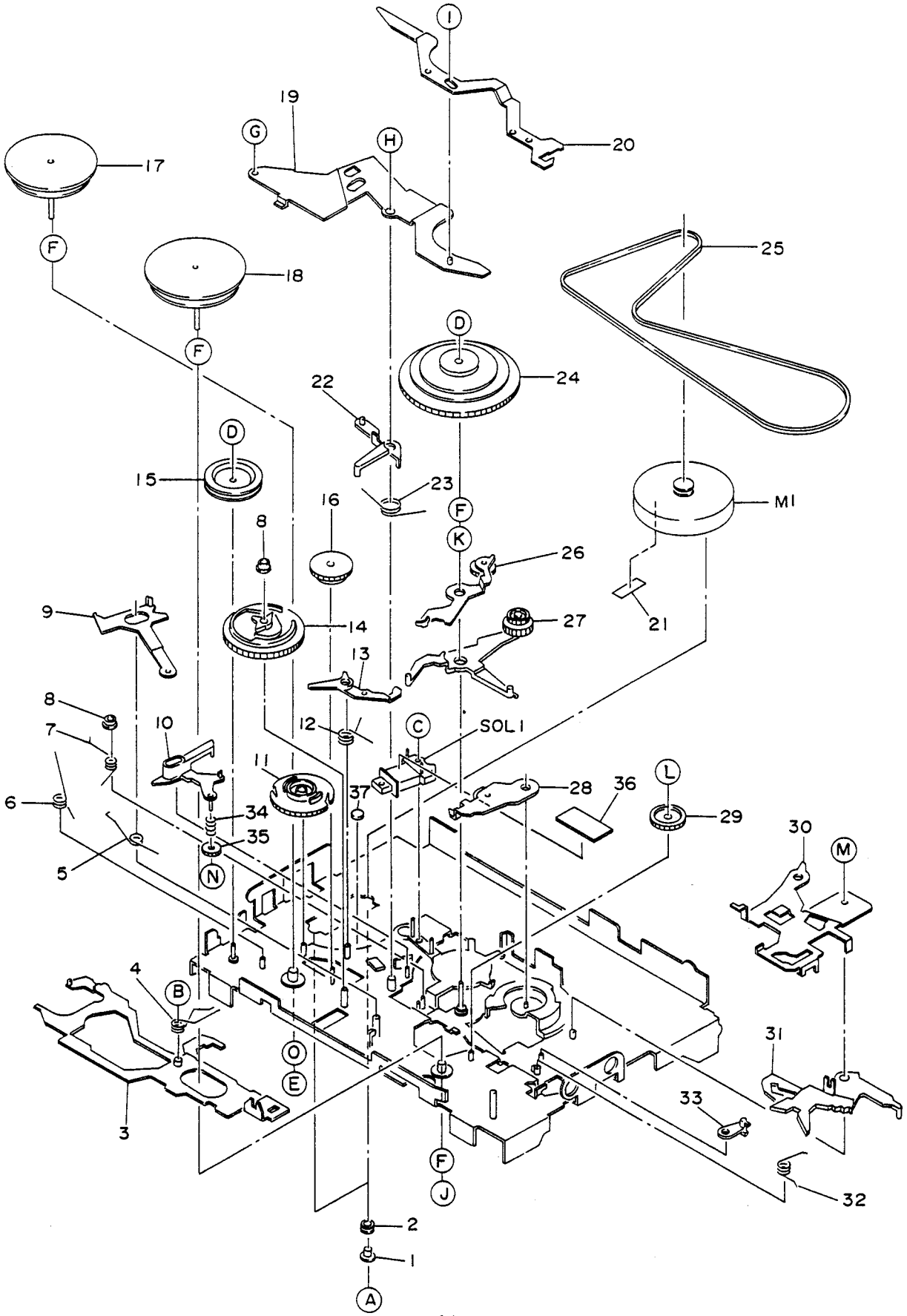
REF. NO.	PART NO.	DESCRIPTION
A	80-ZM1-327-010	S – SCREW,1.4 – 5.5



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	2-1	★80-ZM1-316-110	OUT – SERT ASSY		1
	2-2	★80-ZM1-329-010	T – SPRING, PINCH F		1
	2-3	★80-ZM1-221-110	LEVER PINCH F ASSY		1
	2-4	★80-ZM1-330-010	T – SPRING, PINCH R		1
	2-5	★80-ZM1-227-110	LEVER PINCH R ASSY		1
	2-6	★80-ZM1-319-010	CHASSIS SLIDE ASSY		1
	2-7	★80-ZM1-321-010	GUIDE, TAPE		1
	2-8	★87-067-790-010	SHEET 3 – 3 – 0.2		1
	2-9	★84-530-213-010	P – SPRING, PUSH A		1
	2-10	★80-ZM1-251-010	PLATE, EJECT		1
	2-11	★80-ZM1-252-010	LEVER, CONNECT		1
	2-12	★80-ZM1-287-010	T – SPRING, LOCK OFF		1
	2-13	★80-ZM1-283-010	C – SPRING, REVERSE REEL		1
	2-14	★80-ZM1-260-110	REEL, TABLE R		1
	2-15	★80-ZM1-259-010	REEL, TABLE F		1
	2-16	★80-ZM1-284-110	C – SPRING, FORWARD REEL		1
	2-17	---	CAP, CONNECT		1
	2-18	★80-ZM1-258-010	GEAR, CONNECT		1
	2-19	★80-ZM1-276-010	T – SPRING, PLAY		1

EXPLODED VIEW – 3

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
A	87-237-525-310	O+1.7-2.5	F	80-ZM1-308-010	SHEET 1.85-3.45-0.05	K	87-067-136-010	STE 1.3-3.7-0.25
B	87-067-742-010	PW 2.13-3.5-0.25(SLT)	G	87-232-508-310	O+1.4-3.5(3)	L	87-067-516-010	PW 3-1.58-0.25(SLT)
C	87-067-246-010	V+1.4-3.7	H	87-268-505-310	V+1.4-2.5	M	80-ZM1-294-010	SPECIAL SCREW M1.7-3-0.2
D	87-544-440-010	PW 1.2-4-0.25(SLT)	I	87-067-895-010	PW 1.5-4-0.2 SLT	N	87-067-367-010	PW 0.95-2.6-0.25C
E	87-067-788-010	SHEET 1.15-3.5-0.3(CUT)	J	87-067-741-010	SHEET 1.37-3-0.5(CUT)	O	87-067-789-010	PW 1.6-3.45-0.25



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	3-1	★86-541-449-010	COLLAR, MOTOR B		2
	3-2	★86-511-445-010	G CUSHION, MOTOR		2
	3-3	★80-ZM1-244-110	LEVER DIRECTION ASSY		1
	3-4	★80-ZM1-282-310	T – SPRING, TAKE – UP		1
	3-5	★80-ZM1-273-010	T – SPRING, MAIN CAM		1
	3-6	★80-ZM1-275-010	T – SPRING, DIRECTION		1
	3-7	★80-ZM1-274-010	T – SPRING, AUTO		1
	3-8	---	COLLAR, PWB P		2
	3-9	★80-ZM1-263-110	ARM, MOTOR SW		1
	3-10	★80-ZM1-239-110	ARM, AUTO		1
	3-11	★80-ZM1-255-010	CAM, DIRECTION		1
	3-12	★80-ZM1-277-110	T – SPRING, CHANNEL LOCK		1
	3-13	★80-ZM1-261-110	ARM, DIRECTION LOCK		1
	3-14	★80-ZM1-253-010	CAM, MAIN		1
	3-15	★86-541-235-110	PULLEY, RELAY B		1
	3-16	★80-ZM1-257-010	GEAR, B		1
	3-17	80-ZM1-214-110	FLYWHEEL F ASSY		1
	3-18	80-ZM1-218-010	FLYWHEEL R ASSY		1
	3-19	★80-ZM1-265-210	PLATE HOLDER ASSY		1
	3-20	★80-ZM1-270-310	LEVER, LOCK OFF		1
	3-21	★80-ZM1-296-010	SHEET, MOTOR 16 – 5		1
	3-22	★80-ZM1-266-010	ARM, LOCK MD		1
	3-23	★80-ZM1-278-010	T – SPRING, PLUNGER ARM		1
	3-24	★80-ZM1-209-410	GEAR MAIN ASSY		1
	3-25	80-ZM1-291-010	BELT, SQ 72.9		1
	3-26	★80-ZM1-230-210	ARM TAKE – UP F ASSY		1
	3-27	★80-ZM1-241-110	ARM FF REW ASSY		1
	3-28	★80-ZM1-234-010	ARM TAKE – UP R ASSY		1
	3-29	★80-ZM1-256-110	GEAR, A		1
	3-30	★80-ZM1-269-110	PLATE, HOLDER LEFT		1
	3-31	★80-ZM1-264-310	LEVER, FF REW		1
	3-32	★80-ZM1-281-010	T – SPRING, FF REW		1
	3-33	★80-ZM1-262-010	LEVER, FR STOP		1
	3-34	★80-ZM1-272-010	C – SPRING, AUTO		1
	3-35	★80-ZM1-240-010	GEAR, AUTO		1
	3-36	★80-ZM1-306-010	SHEET 5 – 20 – 0.05		1
	3-37	★80-ZM1-309-010	CUSHION – G 3 – 0.5		1

SPRING APPLICATION POSITION